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DRAFT 2011 NATA CHLOROPRENE – DUPONT/DENKA, LAPLACE, LOUISIANA
COMMUNICATIONS PLAN
May 2016

DESK STATEMENT

EPA and the state of Louisiana are taking a series of investigative actions including independent air sampling to gather the necessary scientific information to determine if levels of chloroprene outside the Denka, formerly DuPont facility in LaPlace, threaten public health of citizens living and working in the community. Federal and state officials are working closely with Denka and DuPont representatives in the course the investigation. Both EPA and LDEQ are also reviewing permit requirements as well as other regulatory changes that may be necessary for chloroprene sources.

TOPLINE MESSAGES

EPA's intent is not to alarm but to inform and to further investigate in order to be more certain of the level of risk that sources pose in St. John the Baptist Parish.

While the analytical methods supporting NATA are sound and based on the most advanced understanding and best data we have, the agency has been forthright in explaining the limitations of this analysis.

The reason for NATA analysis is precisely for situations like St. John the Baptist Parish - to identify areas with potentially unacceptable high risk ideally for additional action.

EPA and state of Louisiana are acting on the NATA information in partnership with state and local community and with the cooperation of sources in the area.

OVERVIEW

On December 17, EPA announced its 5th national scale assessment. The 2011 National Air Toxics Assessment (NATA), a screening-level assessment, for the United States. NATA is not a definitive predictor of health effects. NATA is a tool for EPA and States/local/Tribal Agencies to prioritize pollutants, emission sources and locations of interest.

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NATA contains emissions data from 2011 and uses models to make broad estimates of health risks over geographic areas of the country. NATA uses emissions, modeled ambient conditions and estimated inhalation exposures from outdoor sources.

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Draft, Deliberative

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Although NATA does not rank or single out areas of the country as having the highest risks, the results include a census tract level cancer risk information which is available online via EPA's Geoplatform – NATA Web App.

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Estimated risk is reported as 'x in a million' potential cases of cancer based on if 1 million people were continuously and equally exposed to a specific chemical for 24 hours per day over 70 years. In general, EPA looks more closely at areas with greater than 100 in a million estimated risk.

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The NATA 2011 found a high estimated cancer risk census track in St. John the Baptist Parish, Louisiana. At this location, estimated risk of 800-in-a-million was indicated by NATA. This elevated risk is driven by chloroprene emissions from the DuPont/DENKA Neoprene Production facility.

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EPA suggests that the results of this assessment be used cautiously, as the overall quality and uncertainties of the assessment will vary from location to location as well as from pollutant to pollutant.

Chloroprene is a chemical used in the production of Neoprene. Neoprene has a variety of uses, such as wetsuits, gaskets, hoses and adhesives. Chloroprene was classified as a likely carcinogen by EPA in 2010.

EPA verified the modeled emissions data with DuPont/DENKA. Using its authority under the Clean Air Act, the agency will require the facility to provide data and perform more detailed stack testing for emissions and a review of emission controls at the facility.

This analysis indicates the need for further follow up. A closer look at the emissions, pollution controls and operations at the facility, along with air monitoring in the surrounding area and nearby communities, is necessary to more confidently assess the risks.

EPA will continue to work with the state, local communities and the facility to address emissions in the near term and will initiate a review of the Clean Air Act toxics regulations that are currently in place to determine what new technologies and approaches can further reduce emissions and risks from chemical manufacturers in this sector.

BACKGROUND

NATA can identify locations for further study, prioritize pollutants and emission sources and inform monitoring programs. NATA doesn't draw conclusions about actual risk, control specific sources or pollutants, sole support for regulations, compare risks among different areas of the country, or compare to previous NATA assessments.

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Draft, Deliberative

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The 2011 NATA found potential elevated cancer risks in LaPlace, Louisiana that were attributed to chloroprene emissions from the Denka/DuPont Neoprene Facility. The estimated upper bound excess lifetime cancer risks were estimated to be 800-in 1 million (8×10^{-4}) at the census tract level, with block level risks on the order of 1,800-in 1 million (1.8×10^{-3}). These estimated cancer risks are the highest predicted by NATA in this and historical releases. Prior to the release of NATA, EPA briefed local community government and environmental groups, incoming and outgoing state officials, and Congressional representatives on the results.

In December 2015, EPA Region 6 issued a 114 information request to Denka and DuPont to obtain existing compliance monitoring data from the facility including a follow-up request based on the initial response. Denka/DuPont completed its submission to EPA on March 31, 2016. EPA has shared information from the response with LDEQ.

Since the release of NATA 2011 in December 2015, the Louisiana Department of Environmental Quality (LDEQ), Denka, and EPA Region 6 have conducted limited modeling and ambient monitoring to assess the presence of chloroprene offsite.

EPA Region 6 conducted verification modeling and risk assessment of the NATA results at a neighborhood level of resolution, using 2014 Emissions Inventory data. The refined modeling effort can be utilized to attribute concentrations of chloroprene within the community back to emissions source(s) and calculate source attribution. The modeling generally confirmed results noted in the 2011 NATA.

From March 1 through March 10, 2016, LDEQ collected grab samples (15 seconds) around the facility (25 samples on 6 days over the course of 2 weeks). Results show the presence of chloroprene and indicate the need for additional monitoring.

From March 1 through March 10, 2016, EPA Region 6 conducted ambient monitoring over approximately 2 to 8--and-24-hour time periods in five neighborhoods (4 samples per site) over a 2-week period. Preliminary results indicate the presence of chloroprene. Region 6 is evaluating the results, conducting quality assurance activities, and preparing a final sampling report.

Denka conducted concurrent ambient monitoring in March. Preliminary results indicate all results are below detection limits. Region 6 has requested Denka's report to evaluate and compare methodology and detection limits.

EPA HQ has developedis developing a numeric air quality health screening level to compare to future longer term air monitoring sample results for chloroprene (Attachment: Memorandum, May 5, 2016: Preliminary Risk-Based Concentration Value for Chloroprene in Ambient Air). The numeric screening level was transmitted to LDEQ on May 6.

On April 5, 2016, LDEQ met with representatives from DuPont and Denka to discuss additional information regarding the facilities permits. LDEQ requested 1) additional leak

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Draft, Deliberative

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detection of emission sources; 2) fence line ambient air monitoring plan; and 3) updated modeling of permitted emission sources at the plant.

On May 7, LDEQ met with representatives from Denka to follow up on the above mentioned activities.

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ROLL OUT SCHEDULE (INCLUDES SIGNIFICANT ACTIONS)

Overview: This communication plans provides for notification and post-notification monitoring of elected officials, primary stakeholders, the public, and media interested in this action.

SIGNIFICANT ACTIONS

May 2 EPA formally issues 114 site visit request letter to Denka.

May 5-6 Visible Field Activity: 24-hour air sampling canisters collected in community during Denka shutdown period before May 12.

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May 3 Limited Release: Final -- Evaluation of ambient air sampling results from areas surround the Denka/DuPont facility in LaPlace, LA in March 2016

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May 6 Limited Release: Final -- Preliminary Risk-Based Concentration Value for Consideration of Chloroprene Measurements in Ambient Air around the Denka Neoprene Production Facility

Chloroprene in Ambient Air

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May 11 Limited Release: Final -- Evaluation of ambient air sampling results from areas surround the Denka/DuPont facility in LaPlace, LA in March 2016

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May 11 LDEQ follow up meeting with Denka regarding Denka-air monitoring plan and modeling due to LDEQ.

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May 9 Visible Field Activity: 24-hour air sampling canisters collected in community during Denka shutdown period before May 12.

May 18 Visible Field Activity: EPA/LDEQ site visit at Denka/DuPont to review neoprene operation within the facility, the process flow and the location of potential emissions points, and any pollution controls in place.

May 25 EPA 114 Letter to Denka to conduct source testing and analysis.

Late May Visible Field Activity: 24-hour air sampling canisters collected in community for the upcoming 3 to 6 months.

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Roll Out

May 3 Tuesday, In person General update with LDEQ Secretary Chuck Carr-Brown

May 20 6 Friday, Conference call General update with St. John the Baptist Parish President Natalie Robottom and local officials

May 23 9 Monday, Launch information webpage

May 23 Monday, Email general update to Congressional members, Governor and local elected officials

May 23 Monday, Email general update to NGOs

May June 1 Wednesday Tuesday, Conference call General Update with NGOs

May 12 June 2 Thursday, Status briefing with St. John the Baptist Parish President Natalie Robottom and local officials

May 18 June 8 Wednesday, Community Meeting Practice Session

May 19 June 9 Thursday, Status briefing with St. John the Baptist Parish President Natalie Robottom and local officials

June 10 May 20 Friday, Briefing with Congressional members
Friday, Update for NGOs
Friday, Announce Community Meeting for Tuesday, May 24

May 23 June 13 Monday, Community Meeting Practice Session

June May 16 4 Thursdayuesday, Update informational website

Tuesday June 16 Thursday Status briefing with St. John the Baptist Parish President Natalie Robottom and local officials

Tuesday June 16 Thursday Community Meeting

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QUESTIONS/ANSWERS

Q: What is Chloroprene?

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A: Chloroprene is a chemical used in the production of neoprene. Neoprene has a variety of uses, such as in wetsuits, gaskets, hoses, and adhesives. Chloroprene is classified as ~~an~~ a likely carcinogen by several agencies, including EPA.

Q: Why was chloroprene determined to be a carcinogen?

A: In 2010 EPA's Integrated Risk Information System (IRIS) assessment – which identifies and characterizes the health hazards of chemicals found in the environment – identified chloroprene as a likely human carcinogen and provided a unit risk estimate (URE). A URE provides the upper-bound excess lifetime cancer risk estimated to result from continuous exposure to an agent at a concentration of 1 microgram per cubic meter ($\mu\text{g}/\text{m}^3$) in air. The URE for chloroprene was used in the 2011 NATA.

Q: What is the difference between ~~a known and a~~ likely ~~and probable~~ carcinogen?

A: ~~The EPA conducts assessments to determine the potential of chemicals to cause cancer to humans. All the data available for a chemical is analyzed following EPA's cancer guidelines (published in 2005) and according to the strength of the evidence, in descending order, chemicals can fall under the following general categories (also called hazard descriptors). There are five current weight of evidence descriptors: carcinogenic to humans, likely to be carcinogenic to humans, suggestive evidence of carcinogenic potential, inadequate information to assess carcinogenic potential, and not likely to be carcinogenic to humans. A classification of known carcinogen indicates that there is strong evidence that a chemical causes cancer in humans. A likely classification does not reach the level of strength of evidence as the latter, but there is sufficient evidence to conclude that a chemical is a suspect carcinogen to humans.~~

Q: ~~What is the estimated health risk?~~

A: ~~The primary concern is potential risk of cancer from chronic (long-term/lifetime) cancer risk from exposure to chloroprene.~~

Commented [P11]: Is this specifically referring to the NATA cancer risk estimates or the general health effects of chloroprene?

Q: Why wasn't this facility identified in previous NATA assessments?

A: The IRIS assessment for chloroprene was completed in 2010. While the previous ~~(2005)~~ NATA was released in early 2011, the analyses were completed in 2010 prior to the availability of the URE for chloroprene. ~~— five years after the 2005 NATA.~~ At the time of the 2005 NATA, chloroprene did have a noncancer reference concentration – a measure of potency for pollutants with effects other than cancer – and that was used in the assessment.

Q: Does EPA have any regulations for chloroprene?

A: Chloroprene is used in the production of Neoprene, which is covered under EPA's Polymers and Resins I source category. This source category went through a risk and technology review (RTR) in 2008. No cancer risks were estimated at that time because chloroprene did not have a URE.

Q: Will EPA do another RTR for the Polymers and Resins source category in light of the URE for chloroprene?

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Draft, Deliberative

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A: Under Section 112 of the Clean Air Act, EPA is required to periodically perform a review of standards and available technologies for categories for which we have set technology-based standards (e.g., a MACT standard). This category is up for review in 2016.

Q: What is EPA doing to address issues the issue of chloroprene in La Place, LA?

A: NATA is a screening tool that tells use where to look as we gather more information. EPA will launch a process to engage the community and local leaders in developing a plan to gather information important to addressing community concerns, and useful to EPA as it evaluates regulatory changes need to protect public health and the environment.

Commented [dps2]: This needs to be updated to reflect more recent activities than NATA.

Q: What is NATA?

A: The National Air Toxics Assessment (NATA) is a screening tool that identifies areas for further analysis to protect Americans from potential health risks. NATA does not single out one area of the country as having the highest risks. NATA uses estimates of emissions and computer models to approximate risks; it is not designed to determine actual health risks to individual people. Emissions data underlying the assessment can vary in level of detail from state to state. For example, one state that reports very detailed emissions data could appear to have higher risks than a state that reports a less complete inventory. In this case, a comparison would not be accurate.

What about: EPA is coordinating closely with LDEQ. Together, we are requiring the facility to conduct emissions testing, additional ambient monitoring, and update modeling for a permit. EPA is committed to getting information on emissions as soon as possible. The Agency will require emissions reductions if necessary. We are also working with community leaders and members to understand and respond to their concerns.

Q: What data are available via NATA App?

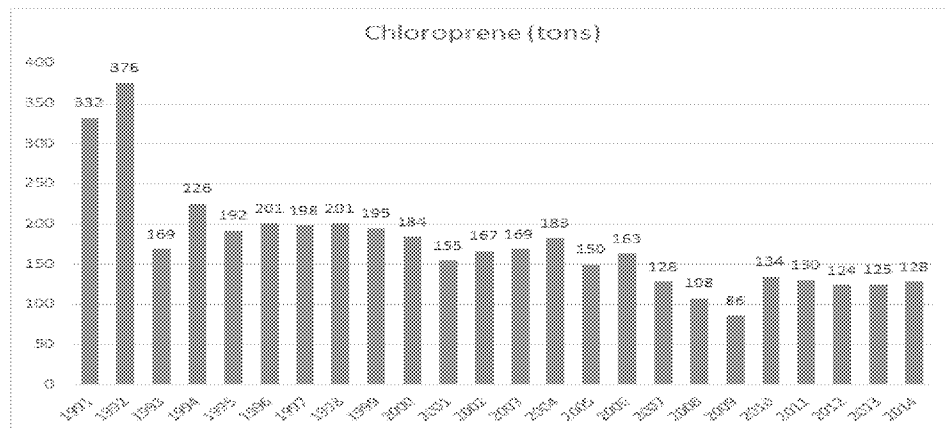
- Emissions Data
 - County and facility level
- Modeled Ambient and Exposure Concentration Data
 - Pollutant (180) and source category (broad) summaries at census tract level
- Cancer and Noncancer Risks
 - About 140 pollutants at census tract level
 - Pollutants and source group (41) summaries
 - Cancer risks expressed as in-1 million
 - Noncancer risks expressed as Hazard Indices

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Q: How long has this been going on?

A: The DuPont-La Place facility has been operating for many years. Historical reporting by the facility show chloroprene emission levels for many years.

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Not included above, TRI reports 1988, 1989 and 1990 chloroprene emissions from this facility were: 479 tpy, 486 tpy, and 461 tpy, respectively.

Q: What is the facility allowed to emit under its CAA permit?

A: The current allowable emissions from the facility are 200 tpy, with a few emission points at the facility emitting the majority of the chloroprene.

Q: What are the highest NATA cancer risk areas in the USA?

A: The top 6 census tracts with the highest NATA estimated highest cancer risks nationally are in Louisiana due to DuPont chloroprene emissions.

Q: What risk is acceptable?

A: Under EPA's air toxics risk management framework, a cancer risk of 100-in-1 million is generally described as the upper limit of acceptability for purposes of risk-based decisions. Cancer risks at or below 1-in-1 million indicate little potential for cancer risk in the air toxics program. When existing source emissions are too high to achieve the 1-in-1 million level and controls are being considered, EPA is interested in controls that reduce off-site exposure concentrations associated with cancer risks to no higher than approximately 1-in-1 million for as much of the nearby population as feasible.

Q: What is the preliminary cancer risk based comparison level for chloroprene?

A: The 100-in-1 million cancer risk-based comparison level and the 1-in-1 million cancer risk-based comparison levels for chloroprene are 0.2 ug/m³, and 0.002 ug/m³ respectively.

Q: NATA shows high risks at my child's school. Should I send them back to school after the summer break?

Commented [dps3]: David – I added some Qs here, based on our conversation last week. If you'd like them somewhere else instead, just let me know.

Q: How did EPA decide where to place monitors in the community?

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Draft, Deliberative

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Q: How long will they be there?

Q: My (mom, dad, child) has cancer. Is it from the facility?

Q: Is the facility going to shut down? Will I lose my job?

Q: Am I safe?

Q: Why is the facility using chloroprene?

Q: What can the facility do to reduce its emissions of chloroprene?

Q: What is EPA making them do?

Q: Where can I find more information? Monitoring results? Emissions values?

Q: Why are so many agencies involved?

Q: Why is EPA monitoring in my community? What did they find?

Q: EPA found a concentration of XX at my child's school. Is that safe?

Q: EPA says that ambient concentrations should be below 0.2 µg/m³. Monitored concentrations are above that. Is that safe?

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